



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/775,904	02/10/2004	Robert A. Mackin	3064-A-15	1198
26740 7590 03/26/2007 C. ROBERT VON HELLENS CAHILL, VON HELLENS & GLAZER P.L.C. 155 PARK ONE, 2141 E. HIGHLAND AVENUE PHOENIX, AZ 85016			EXAMINER LEUBECKER, JOHN P.	
			ART UNIT 3739	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		03/26/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.		Applicant(s)	
	10/775,904		MACKIN, ROBERT A.	
	Examiner		Art Unit	
	John P. Leubecker		3739	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,5,7-9,12,14,-17,20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,2,4,5,7,9 and 12 is/are allowed.
- 6) ☒ Claim(s) 8,14-17 and 20 is/are rejected.
- 7) ☒ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Drawings

1. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because the drawings do not comply with at least 37 CFR 1.84 (1) which requires clean, dark, uniform and well-defined lines. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 8, 16 and 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claim 16, term "said batteries" lacks antecedent basis.

As to claims 8 and 17, term "the wall" lacks antecedent basis.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 14-16 and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Hill (U.S. Pat. 6,929,600).

Referring mainly to Figures 2a, 2c and 4a, Hill discloses a source of light (64) comprising at least one light emitting diode (col.5, line 1) for illuminating the tissue to be imaged; a further fiber optic bundle (66) extending from said connector to the distal end of said endotracheal tube; a lens (72) disposed at the distal end of said endotracheal tube for receiving the image of the tissue; a yet further fiber optic bundle (74) interconnecting said lens with said connector; a camera (70) for recording the image; a transmitter (note signal line from camera 70 to monitor 56, Fig.2c) for receiving the image from said camera and for transmitting the image; a receiver (circuitry in monitor inherently receives camera signal) for receiving the transmitted image; and a display (screen on monitor 56) for displaying the image received by said receiver. The fiber optic bundle for conveying the light to a connector and the still further fiber optic bundle interconnecting said connector with said camera are anticipated in the embodiment shown in Figure 4a which includes a releasable connector (76). In this case, two additional fibers extend from the connector (76) to the camera and light source (note col.5, lines 12-46). As to claims 15, note col. 7, lines 58-60. As to claim 16, note col.8, lines 53-65. As to claim 20, almost anything smaller than a house is portable.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hill in view of Mackin (U.S. Pat. 5,285,778).

The optical fibers of the camera system of Hill (as described above) extend through the main channel of the endotracheal tube (10). Thus, Hill fail to disclose that the optical fibers are embedded in the wall of the endotracheal tube. However, Mackin discloses a similar system in which the optical fibers for illumination and viewing are embedded in the wall of the endotracheal tube (Fig.3A, col.2, lines 59-62). It would have been obvious to one of ordinary skill in the art to have extended the optical fibers through the wall of the endotracheal tube of Hill to free up the main channel of such tube for ventilation, suctioning or the like. In this case, the endotracheal procedure could be continued without insertion or removal of the viewing device within the main channel of the endotracheal tube, creating a more efficient procedure.

Allowable Subject Matter

8. Claims 1, 2, 4, 5, 7, 9 and 12 are allowed.

Art Unit: 3739

9. Claim 8 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

10. The following is a statement of reasons for the indication of allowable subject matter:

Claim 1, as amended in the paper filed December 22, 2006, now recites a combination of elements that are neither explicitly taught or fairly suggested by the prior art of record.

Regarding the Sano et al. reference used in the previous rejections, claim 1 now recites, *inter alia*, four separate fiber optic bundles, one pair on either side of the connector. There would be no justification for modifying the Sano et al. device to include an additional optical fiber bundle between, for example, the lens (7) and CCD (22) in Figure 1 of Sano et al. since such addition would be unnecessary and inferior (in an optical sense) to a direct optical connection or one with additional lenses. Although Hill ('600) (which appears to be the closest prior art of record to the instant claims) discloses a substantially similar endotracheal tube and camera system, as described above, Hill fails to disclose a radio frequency transmitter and radio frequency receiver between the camera and video monitor. This allows for wireless transmission of the camera image to the video monitor. Although wireless transmission for a camera to a monitor is known in the art (note Sano, US 2002/0022763), the Examiner takes the position that Hill actually teaches away from such wireless transmission by insisting that the monitor (56) be integrated with the camera for the reasons taught in column 4, lines 40-63. There is no reason that wireless transmission of the signal from the camera to the monitor, with their close proximity, would reasonably be contemplated in the Hill reference. Claim 8, although in method form, requires

substantially the same combination of elements discussed above that distinguishes the instant claimed device from the prior art and hence is allowable for the same reasons.

Response to Arguments

11. Applicant's arguments with respect to claims 14-17 and 20 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

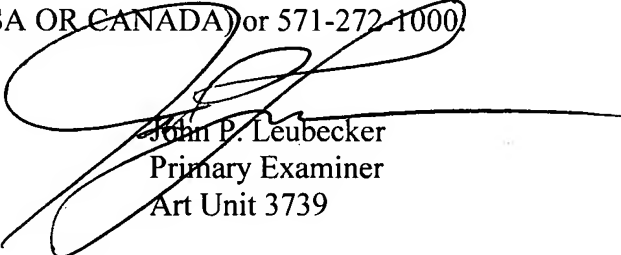
12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John P. Leubecker whose telephone number is (571) 272-4769. The examiner can normally be reached on Monday through Friday, 6:00 AM to 2:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda C.M. Dvorak can be reached on (571) 272-4764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



John P. Leubecker
Primary Examiner
Art Unit 3739

jpl